

**Commonwealth of Kentucky
Energy and Environment Cabinet
Department for Environmental Protection
Division for Air Quality
200 Fair Oaks Lane, 1st Floor
Frankfort, Kentucky 40601
(502) 564-3999**

Final

**AIR QUALITY PERMIT
Issued under 401 KAR 52:020**

Permittee Name: Dart Container Corporation of Kentucky
Mailing Address: Attn: Joe Lowry, Facilities Manager
975 Dixie U.S. Highway 31 West; P.O. Box 309
Horse Cave, Kentucky 42749

Source Name: Same as above
Mailing Address: Same as above

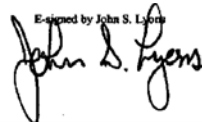
Source Location: Same as above

Permit: V-06-029 R2
Agency Interest: 1774
Activity: APE20080001
Review Type: Title V, Operating
Source ID: 21-099-00024

Regional Office: Bowling Green
1508 Western Avenue
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County: Hart

Application
Complete Date: November 6, 2007
Issuance Date: April 6, 2007
Revision Date: December 18, 2008
Expiration Date: April 6, 2012

E-signed by John S. Lyons


**John S. Lyons, Director
Division for Air Quality**

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Permit Number	Permit type	Log or Activity#	Complete Date	Issuance/ Revision Date	Summary of Action
V-97-037	Initial Title V	E828/F374	2/6/97	3/5/98	Initial Title V
V-97-037 (R1)	Title V Revision	E828/ F374/ 51526	8/7/00	11/16/00	Synthetic Minor/ Title V. Process rate increase in the emission limit at DI foam extrusion process.
V-97-037 (R2)	Title V Revision	E828/ F374/ G747/ G443 (51229)	9/28/02	4/26/01	Synthetic Minor/ Title V/ PSD. Modify and to expand the DI foam manufacturing process.
V-06-029	Title V Renewal	37590	6/16/06	4/6/07	Permit Renewal
V-06-029 R1	Title V Significant revision	APE20070004	11/6/07	3/27/08	Removed regulation and limits on the Foam emission unit. Add new boiler.
V-06-029 R2	Title V Significant revision	APE20080001	4/22/08	TBD	Add new boiler and other insignificant activities.

SECTION A - PERMIT AUTHORIZATION

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first submitting a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:020, Title V Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

- | | | |
|----|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 01 | (BLR-01) | One (1) Cleaver Brooks 700 HP Steam Boiler
Construction Date: January 1979
Primary fuel: Natural Gas
Backup fuel: Fuel Oil #2
Maximum rated capacity: 31.40 million British thermal units per hour (MMBtu/hr) |
| 02 | (BLR-02) | One (1) Cleaver Brooks 700 HP Steam Boiler
Construction Date: January 1979
Primary fuel: Natural Gas
Backup fuel: Fuel Oil #2
Maximum rated capacity: 31.40 MMBtu/hr |
| 03 | (BLR-03) | One (1) Cleaver Brooks 800 HP Steam Boiler
Construction Date: June 1987
Primary fuel: Natural Gas
Backup fuel: Fuel Oil #2
Maximum rated capacity: 33.50 MMBtu/hr |

APPLICABLE REGULATIONS:

401 KAR 59:015, New indirect fired heat exchangers, applies to the particulate matter and sulfur dioxide emissions from the combustion of natural gas and fuel oil.

1. Operating Limitations:

Refer to compliance demonstration methods for subsection **2. Emission Limitations**, below.

2. Emission Limitations:

- a. Pursuant to 401 KAR 59:015, Section 4(1)(c), emissions of particulate matter from emission units 01, 02, and 03 from the combustion of either natural gas or fuel oil shall not exceed 0.328 lb/MMBtu.
- b. Pursuant to 401 KAR 59:015, Section 4(2), the opacity of visible emissions from the combustion of either natural gas or fuel oil shall not exceed 20%.
- c. Pursuant to 401 KAR 59:015, Section 5(1)(c)1, emissions of sulfur dioxide from emission units 01, 02, and 03 from the combustion of either natural gas or fuel oil shall not exceed 1.18 lb/MMBtu.
- d. The total VOC emissions from combustion of natural gas and fuel oil # 2 from emission units 01, 02, and 03 shall not exceed 1.174 tons per year (tpy) during any twelve consecutive month period [Synthetic Minor Limit].

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Note: The increase of VOC emissions from using emission units (01), (02), and (03) as the control device for burning pentane (Captured at emission point 04) shall not be included in determining compliance with above, but shall be counted as emissions from Emission Unit 04, the cup manufacturing.

Compliance Demonstration Method:

- a. Compliance with the particulate matter emission limit is demonstrated while burning natural gas or fuel oil # 2.
- b. Compliance with the opacity limit is demonstrated while burning natural gas. Refer to **4. Specific Monitoring Requirements** when burning fuel oil #2.
- c. Compliance with the sulfur dioxide emission limit is demonstrated while burning natural gas. When burning fuel oil # 2,
$$\text{SO}_2 \text{ emission (lb/hr)} = 157S \text{ lb/1000 gal} / (140 \text{ MMBtu/1000 gal}) \text{ where } S = \text{weight \% of sulfur in the fuel.}$$
- d. The total VOC emission from emission units 01, 02, and 03 shall be calculated and recorded on monthly basis from the combustion of natural gas emissions and fuel oil.
For natural gas combustion;
$$\text{VOC emission (tons/ month)} = \text{amount of natural gas combusted per month (10}^6 \text{ scf/month)} \times 5.5 \text{ (lbs VOC/10}^6 \text{ scf)} \times 1/2000 \text{ (tons/lbs).}$$

For # 2 fuel oil combustion;
$$\text{VOC emission (tons/ month)} = \text{amount of fuel oil combusted per month (10}^3 \text{ gallons/month)} \times 0.2 \text{ (lbs VOC/10}^3 \text{ gallons)} \times 1/2000 \text{ (tons/lbs).}$$

3. Testing Requirements:

Pursuant to 401 KAR 59:005 Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in 401 KAR 50:015 shall be conducted as required by the Division.

4. Specific Monitoring Requirements:

The permittee shall monitor and maintain records of the following information:

- a. The total monthly fuel usage rate (cubic feet per month or gallons per month) for each fuel.
- b. The sulfur content of each type of fuel burned. The sulfur content maybe determined by fuel sampling and analysis or by fuel supplier certification.
- c. When burning fuel oil # 2, the permittee shall perform qualitative visible observations of the opacity of emissions from each stack on a monthly basis and maintain a log of the observation. If visible emissions from stack are seen when burning fuel oil #2, then the opacity shall be determined by EPA Reference Method 9 and an inspection shall be initiated for any necessary repairs if the opacity limit is exceeded.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

5. Specific Recordkeeping Requirements:

See Specific Monitoring Requirements above.

6. Specific Reporting Requirements:

None

7. Specific Control Equipment Operating Conditions:

None

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- 19 (BLR-04) One (1) Cleaver Brooks 800 HP Steam Boiler
Construction Date: March 2007
Primary fuel: Natural Gas
Backup fuel: Fuel Oil #2
Maximum rated capacity: 33.50 MMBtu/hr
- 21 (BLR-05) One (1) Cleaver Brooks 800 HP Steam Boiler
Construction Date: May 2008
Primary fuel: Natural Gas
Backup fuel: Fuel Oil #2
Maximum rated capacity: 33.50 MMBtu/hr

APPLICABLE REGULATIONS:

401 KAR 59:015, New indirect fired heat exchangers, applies to the particulate matter and sulfur dioxide emissions from the combustion of natural gas and fuel oil.

Compliance with 401 KAR 59:015 for SO₂, PM, and opacity is demonstrated by compliance with 40 CFR 60, Subpart Dc.

401 KAR 60:005, incorporating by reference 40 CFR 60, Subpart Dc, Standards of performance for small industrial-commercial-institutional steam generating units, for units less than or equal to 100 MmBtu/hr but greater than or equal to 10 MmBtu/hr commenced after June 9, 1989.

40 CFR 63 Subpart DDDDD, National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters was vacated and remanded by U.S. Court of Appeals on July 30, 2007. The facility will be required to perform a case-by-case MACT analysis, if notified to do so.

1. Operating Limitations:

Refer to compliance demonstration methods for subsection **2. Emission Limitations**, below.

2. Emission Limitations:

- a. Pursuant to 40 CFR 60.43c(e)(1), the permittee of an affected facility that commences construction, reconstruction, or modification after February 28, 2005, and that combusts coal, oil, wood, a mixture of these fuels, or a mixture of these fuels with any other fuels and has a heat input capacity of 8.7 MW (30 mmBtu/hr) or greater shall not cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of 13 ng/J (0.030 lb/mmBtu) heat input, except as provided in 40 CFR 60.43c(e)(2), (e)(3), and (e)(4).
- b. Pursuant to 40 CFR 60.43c(c), emissions from an indirect heat exchanger shall not exceed 20 percent opacity (six-minute average), except for one 6-minute period per hour of not more than 27 percent opacity.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- c. Pursuant to 40 CFR 60.42c(d), emissions of sulfur dioxide from emission units 19 and 21 from the combustion of fuel oil shall not exceed 0.5 lbs/MMBtu; or as an alternative, shall not combust oil that contains greater than 0.05 weight percent of sulfur.
- d. To preclude the significant emission increase level for SO₂ in PSD regulations, 401 KAR 51:001 and 401 KAR 51:017, emissions of SO₂ from emission units 19 and 21 shall not exceed 36 tpy.
- e. To preclude the significant emission increase level for NO_x PSD regulations, 401 KAR 51:001 and 401 KAR 51:017, emissions of NO_x from emission units 19 and 21 shall not exceed 36 tpy.

Compliance Demonstration Method:

- a. Compliance with the particulate matter emission limit is demonstrated while burning natural gas or fuel oil # 2.
- b. Compliance with the opacity limit is demonstrated while burning natural gas. Refer to **4. Specific Monitoring Requirements** and **5. Specific Recordkeeping Requirement** when burning fuel oil #2.
- c. Compliance with the sulfur dioxide emission limit is demonstrated while burning natural gas. When burning fuel oil # 2,
$$\text{SO}_2 \text{ emission (lb/hr)} = 157S \text{ lb/1000 gal} / (140 \text{ MMBtu/1000 gal}) \text{ where } S = \text{weight \% of sulfur in the fuel.}$$
- d. Compliance is demonstrated by certification from the supplier or pursuant to 40 CFR 60.42c(g), shall be based on a 30-day rolling average basis for percent reduction requirements. For emission units 19 and 21 the sulfur content shall not exceed 0.05%.
- e. To preclude the significant emission increase level for NO_x PSD regulations 401 KAR 51:001 and 401 KAR 51:017, emission units 19 and 21 must use no more than 1,500,000 gallons per year of fuel oil.
- f. Pursuant to 40 CFR 60.42c(i), the SO₂ emission limits, fuel oil sulfur limits, and percent reduction requirements under this section apply at all times, including periods of startup, shutdown, and malfunction.

3. Testing Requirements:

- a. Pursuant to 40 CFR 60.45c(a), the permittee shall conduct an initial performance test as required under 40 CFR 60.8, and shall conduct subsequent performance tests as requested by the Division, to determine compliance with the standards using the following procedures and reference methods, except as specified in 40 CFR 60.45c(c).
- b. For the purpose of satisfying the initial compliance demonstration for sulfur dioxide emissions pursuant to 401 KAR 59:005 Section 2, the permittee shall submit a report within 90 days of achieving maximum load, but no later than 180 days after installation, containing the vendor fuel certifications for the fuel burned in the first thirty (30) days following achieving the maximum production rate, and the amount of fuel consumed.
- c. Pursuant to 401 KAR 59:005 Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in 401 KAR 50:015 shall be conducted as required by the Division.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

4. Specific Monitoring Requirements:

The permittee shall monitor and maintain records of the following information:

- a. Pursuant to 40 CFR 60.48c(g)(1), the total monthly fuel usage rate (cubic feet per month or gallons per month).
- b. Pursuant to 40 CFR 60.48c(g)(2), the sulfur content of each type of fuel burned. The sulfur content may be determined by fuel sampling and analysis or by fuel supplier certification.
- c. When burning fuel oil # 2, the permittee shall perform qualitative visible observations of the opacity of emissions from each stack on a monthly basis and maintain a log of the observation. If visible emissions from stack are seen when burning fuel oil #2, then the opacity shall be determined by EPA Reference Method 9 and an inspection shall be initiated for any necessary repairs if the opacity limit is exceeded.

5. Specific Recordkeeping Requirements:

- a. Recordkeeping shall be in accordance with 40 CFR 60.48c.
- b. See Specific Monitoring Requirements above.

6. Specific Reporting Requirements:

- a. The permittee shall submit reports as required by Section F.5 and 6 of this permit. This shall satisfy the reporting requirement of 40 CFR 60.48c(j).
- b. Reporting for each boiler shall be in accordance with 40 CFR 60.48c(c)(d)(e) and (f).

7. Specific Control Equipment Operating Conditions:

None

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- 04 (PSCUP-01) Expandable Polystyrene (EPS) Container Manufacturing (Cup Molding Presses, Dumpers, Blenders, Holding Tanks, Pre Expanders, Screeners, Storage Bags).

Construction Date: 07/01/1979

Maximum Operating Capacity: 14,295.77 tons/ year

Control devices: Boilers 01, 02, 03, or 19, or 21

Note: No particulate matter emissions.

APPLICABLE REGULATIONS:

40 CFR 64, Compliance Assurance Monitoring (CAM) for VOC emissions

1. Operating Limitations:

None

2. Emission Limitations:

The VOC (pentane) emissions shall not exceed 203 tpy during any twelve consecutive months period [Synthetic Minor Limit from V-97-037].

Compliance Demonstration Method:

Monthly emissions shall be calculated and be kept available at plant, and shall be used to calculate the annual emission rate.

Monthly Emission Rate = [Monthly EPS throughput rate (tons/ month) x Emission factor (lbs VOC/ton)] - [Monthly Emissions of Pentane captured with the emissions capturing device (hood) as recorded by the Continuous Emission Monitor (CEM) x Destruction Efficiency of the pentane as measured during the last compliance demonstration test]

Yearly Emission Rate = Annual emissions shall be based on emissions for any twelve (12) consecutive months.

3. Testing Requirements:

The Division reserves the right for testing to measure the pentane content in the EPS beads (Raw Material) and the molded cups (Product). The difference is all assumed to be VOC emissions. The Division also reserves the right for testing for the capture efficiency of the hood, the Destruction Efficiency (Control Efficiency) of the pentane captured by hood, and the performance of the Continuous Emission Monitor (CEM).

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

4. Specific Monitoring Requirements:

The permittee shall monitor and maintain records of the following parameters:

- a. The monthly throughput of EPS and the pentane concentration in EPS beads.
- b. The monthly amount of VOC (pentane) in tons, captured by the emissions capturing device.
This shall be measured as proposed by the source using the CEM data and a computer program.
- c. The facility shall continuously monitor flow rate (CFM) and pentane concentration of air into the Pentane Control System in order to determine lb/hr of pentane entering the boilers. The operation of Pentane Control System shall be monitored on an hourly basis to ensure that the system is working properly. The monitor to measure pentane concentration shall be calibrated and operated according to manufacturer's specifications.
- d. Refer to Section E- Control Equipment Conditions for Compliance Assurance Monitoring (CAM) requirements for Emission Point 04.

5. Specific Record keeping Requirements:

- a. See Specific Monitoring Requirements above.
- b. A log shall be kept of all routine and non-routine maintenance performed on each control device.

6. Specific Reporting Requirements:

Refer to Section F.5 and 6.

7. Specific Control Equipment Operating Conditions:

The control equipment consisting of the emissions capturing device (hood), the CEM and the boiler shall be operated according to the manufacturers guidelines or those parameters determined during the most recent performance/compliance test, whichever is more efficient. The air pollution control system shall be maintained regularly in accordance with good engineering practices and the recommendations of the respective manufacturers.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- 05 (IMPACT-01) Impact Extruders & Thermoformers
Construction Date: January 1981
Maximum Operating Capacity: 129648 tons/year of polystyrene
No control devices
- 06 (OPS-01) OPS Extrusion Lines & Thermoformers
Construction Date: January 1996
Maximum Operating Capacity: 42048 tons/year of material processed
No control devices
- 07 (RECYC-01) Recycle/Reclaim Extruders
Construction Date: August 1989
Maximum Operating Capacity: 52560 tons/year of material processed
No control devices
- 20 PET Extrusion (2- Cup lines and 4- Lid lines) & Thermoformer
Construction Date: March 2007
Maximum Operating Capacity (Cup line): 21900 tons/year of material processed
Maximum Operating Capacity (Lid line): 6570 tons/year of material processed
No control devices

APPLICABLE REGULATIONS:

401 KAR 63:020, Potentially hazardous matter or toxic substances, applies to toxic air emissions.

1. Operating Limitations:

Persons responsible for a source from which hazardous matter or toxic substances may be emitted shall provide the utmost care and consideration, in the handling of these materials, to the potentially harmful effects of the emissions resulting from such activities. No owner or operator shall allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals or plants.
[401 KAR 63:020 Section 3]

Compliance Demonstration Method:

The source is in compliance with 401 KAR 63:020 based on the rates of emissions of airborne toxics provided in the application submitted by the source. If the source alters processes, process rates, material formulations, or any other factor that would result in increased emissions of these previously evaluated airborne toxics, or the emission of airborne toxics not previously evaluated by the Division, the source shall submit the appropriate application forms pursuant to 401 KAR 52:020, Section 3(1)(a).

2. Emission Limitations:

None

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

3. Testing Requirements:

Pursuant to 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in 401 KAR 50:015 shall be conducted as required by the Division. If different testing methods are proposed from above mentioned regulation or if there is no suitable reference method for the measurement of VOC, a testing protocol shall be submitted by the source, and be approved by the Division, pursuant to 401 KAR50:045, Performance tests.

4. Specific Monitoring Requirements:

The permittee shall monitor and maintain records of the monthly usage rate of polystyrene.

5. Specific Record keeping Requirements:

See Specific Monitoring Requirements above.

6. Specific Reporting Requirements:

The monthly VOC emissions calculations shall be submitted to the Bowling Green Regional Office on quarterly basis.

7. Specific Control Equipment Operating Conditions:

None

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

08 (FOAMPRINT-01) UV Ink Printers

Construction Date: January 1984

Monthly average capacity: 2 gallons ink/hr; 1.4 lbs cleaning solvent/hr.

No control devices.

APPLICABLE REGULATIONS:

401 KAR 63:020, Potentially hazardous matter or toxic substances, applies to the toxic air emissions.

401 KAR 59:212, New graphic arts facilities using rotogravure and flexography, applies to the UV ink printers.

1. Operating Limitations:

Persons responsible for a source from which hazardous matter or toxic substances may be emitted shall provide the utmost care and consideration, in the handling of these materials, to the potentially harmful effects of the emissions resulting from such activities. No owner or operator shall allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals or plants. [401 KAR 63:020 Section 3]

Compliance Demonstration Method:

The source is in compliance with 401 KAR 63:020 based on the rates of emissions of airborne toxics provided in the application submitted by the source. If the source alters processes, process rates, material formulations, or any other factor that would result in increased emissions of these previously evaluated airborne toxics, or the emission of airborne toxics not previously evaluated by the Division, the source shall submit the appropriate application forms pursuant to 401 KAR 52:020, Section 3(1)(a).

2. Emission Limitations:

None

3. Testing Requirements:

Ink Usage:

- a. The permittee shall make available upon request the results of analyses of samples of the inks used at the facility to verify that the inks meet the requirements of 401 KAR 59:212 Section 6. Reference Method 24 a, as referenced in 401 KAR 50:015, (or an alternate method that was approved by the Division or the EPA) shall be used to determine the VOC content of the inks upon request.
- b. If it requested by the Division, the permittee will be required to test VOC content or the formulation of the ink.

Cleanup Solvent Usage:

None

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

4. Specific Monitoring Requirements:

The permittee shall monitor and maintain records of the following parameters:

Ink Usage -

The monthly usage rates of UV ink and daily hours of operation; and

Cleanup Solvent Usage -

The monthly usage rates of the clean up solvent and daily hours of operation.

5. Specific Record keeping Requirements:

See Specific Monitoring Requirements above.

6. Specific Reporting Requirements:

The monthly VOC emissions calculations shall be submitted to the Bowling Green Regional Office on quarterly basis.

7. Specific Control Equipment Operating Conditions:

None

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

10	(DI Foam - Existing)	Ten (10) Existing DI Foam Extrusion lines with (9) Laminators (Laminating Extruders)
11	(DI Foam - New)	Eight (8) New DI Foam Extrusion lines with (9) Laminators (Laminating Extruders)
12	(---)	Roll Storage
13	(---)	Thermoforming
14	(---)	Scrap Regrinding and Fluff Transfer
15	(---)	Nine (9) Reclaim Extruders (Repelletization)
16	(--)	Isopentane Storage Tank (Pressurized)
17	(--)	Regenerative Thermal Oxidizer
18	(--)	Warehouse Storage (Fugitive Emissions)

BACT Control Device: Regenerative Thermal Oxidizer

Destruction Efficiency: 95%

CAPTURE DEVICES (TABLE 1):

Emission Point	Affected Facility	VOC Capture Device	Capture Efficiency	BACT (RTO) Control Efficiency
10	Extrusion Lines (10)	Hoods over the 'die' part of the Extruders	45.0 - 50.0%	95%
11	Extrusion Lines (8)	Hoods over the 'die' part of the Extruders	45.0 - 50.0%	95%
12	Roll Storage	None	None	None
13	Thermoforming	None	None	None
14	Scrap Regrinding and Fluff Transfer	Ducted to the RTO	100%	95%
15	Reclaim Extruders	Vent, emissions routed to RTO by vacuum	100%	95%
16	Isopentane Storage Tank (Pressurized)	No emissions to the atmosphere	None	None
18	Warehouse Storage	Fugitive Emissions	None	None

Note 1: There is no capture device required for the laminating extruders at emission point 10 and 11.

Note 2: Roll Storage emissions are captured and are controlled by RTO. This is a voluntary action and is not a permit requirement.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**APPLICABLE REGULATIONS:**

401 KAR 51:017, Prevention of Significant Deterioration of Air Quality applies to the VOC emissions from emission points 10 through 18.

401 KAR 63:020, Potentially hazardous matter or toxic substances applies to the styrene emissions from emission points 10, 11, and 15.

40 CFR 64, CAM- Emission units 14 and 15 for VOC emissions.

1. Operating Limitations:**BACT Requirement:**

- a. The VOC emissions shall be captured by the “capture equipment” as listed in table 1 at all times any of the emissions units listed [Emission Points 10, 11, 14 and 15] are in operation.
- b. The VOC emissions shall be captured by the “capture equipment” as listed in table 1 at all times after the foam lines are strung up (emission points 10 and 11) and any time emissions units 14 and 15 are in operation. A 30 minute shut down period will be allowed for the emissions points 10 and 11 after an RTO malfunction is identified to allow for safe shut down.
- c. The capture efficiencies listed in Table 1 shall be met at all the times when the associated emission units are in operation.
- d. The throughputs of polystyrene pellets, and isopentane through primary DI Foam extruders (not including PS for laminator) shall not exceed the following:

Emission Point	Raw Material	lb/hr	tons/hr	Tons per year
10	Iso-Pentane	540	0.27	2332.8
10	Polystyrene pellets	12,000	6	38,880
11	Iso-Pentane	432	0.216	1,866.3
11	Polystyrene pellets	9,600	4.8	31,104

- e. Persons responsible for a source from which hazardous matter or toxic substances may be emitted shall provide the utmost care and consideration, in the handling of these materials, to the potentially harmful effects of the emissions resulting from such activities. No owner or operator shall allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals or plants. [401 KAR 63:020 Section 3]

For Emission Point 12 (Roll Storage)

- f. The permittee shall store the rolls “Inside the building”. The BACT shall be the “Inside roll storage” with RTO as the control equipment.
- g. The VOC emissions shall be captured by the “capture equipment” at all times when the rolls are stored or when any air emissions (VOCs) are generated/emitted from the roll storage building. The capture efficiency shall at-least be 95% for the emissions from roll storage.
- h. The captured VOC emissions shall always be vented to the Regenerative Thermal Oxidizer (Emission Point 17) (RTO).

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**Compliance Demonstration Method:**

- The permittee shall record the occurrence, duration, cause, and any corrective action taken for each incident when the emission units listed [Emission Points 10, 11, 14 and 15] are in operation but the associated capture equipment and control equipment (RTO) is not.
- See the Testing Requirements below.
- See the Monitoring and Recordkeeping requirements below.
- The source is in compliance with 401 KAR 63:020 based on the rates of emissions of airborne toxics provided in the application submitted by the source. If the source alters processes, process rates, material formulations, or any other factor that would result in increased emissions of these previously evaluated airborne toxics, or the emission of airborne toxics not previously evaluated by the Division, the source shall submit the appropriate application forms pursuant to 401 KAR 52:020, Section 3(1)(a).
- For emission point 12 (Roll Storage), refer to Monitoring and Recordkeeping Requirements.

2. Emission Limitations:

- a. BACT Requirement: The total VOC emissions from emission points 10 through 15 shall not exceed 1.455 tons per day and 523.6 tons per year (twelve consecutive month period).
- b. BACT Requirement: The RTO shall reduce the total organic compound emissions (VOC's), less methane and ethane vented to it by 95 percent by weight or greater.
- c. BACT Requirement: The total VOC emissions (fugitives) from emission point 18, Warehouse Storage (fugitives) shall not exceed 61.8 tons per year (twelve consecutive month period).
- d. BACT Requirement:

Emission Point	Affected Facility	Emission Limit (tons per year)
12	Roll Storage	99.7
13	Thermoforming	265.9

Compliance Demonstration Method:**Daily and Yearly VOC Emissions from Emission point 10, 11, 12, 13, 14 and 15:**

- The emission limits for emission points 10 through 15 are combined for the ease of compliance demonstration.
- The permittee has submitted VOC emissions (for fugitives) calculations from warehouse storage based on the data from their Pennsylvania plant. See testing requirements below for compliance with warehouse storage BACT limit.
- Daily emissions shall be calculated using the computer program and be kept available at plant, and shall be used to calculate the annual emission rates. The data recorded/calculated shall be kept available either in hard copy or computer readable form.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

$$\begin{array}{ccccc} \text{Daily} & \text{Total daily} & & \text{Blowing} & & \text{Blowing} & & \text{Destruction} \\ \text{emission} = & \text{amount of} & - & \text{agent} & - & \text{agent} & \times & \text{efficiency of} \\ \text{Rate} & \text{blowing} & & \text{remaining} & & \text{directed to} & & \text{RTO from last} \\ \text{(tons/day)} & \text{agent} & & \text{in the} & & \text{RTO} & & \text{performance} \\ & \text{charged} & & \text{product} & & \text{(tons/day)} & & \text{test} \\ & \text{(tons/day)} & & \text{(tons/day)} & & & & \end{array}$$

$$\begin{array}{ccccc} \text{Blowing agent} & = & \text{Product output} & \times & \text{Source specific emission factor} \\ \text{remaining in the} & & \text{(tons/day)} & & \text{established for all the products} \\ \text{product} & & & & \text{(tons of VOC/ton of product)} \\ \text{(tons/day)} & & & & \end{array}$$

$$\begin{array}{ccc} \text{Blowing agent} & & \text{Mass of VOC emissions} \\ \text{directed to RTO} & = & \text{(tons/day) as determined by the} \\ \text{(tons/day)} & & \text{computer program using IR} \\ & & \text{sensor, and mass flow meter data} \end{array}$$

Note: See Testing Requirements below

Monthly Emission Rate = Sum of daily emissions in a calendar month.

Yearly Emission Rate = Annual emissions shall be based on emissions for any twelve (12) consecutive months.

- See 3. Testing Requirements below for compliance with BACT limits on Roll Storage and Thermoforming.

3. Testing Requirements:

- Pursuant to 401 KAR 50:045, Section 1, performance testing using appropriate reference methods specified in 401 KAR 50:015, shall be conducted within 180 days of issuance of the final permit to demonstrate that RTO will achieve 95% destruction efficiency or greater. If different testing methods are proposed from above mentioned regulation or if there is no suitable reference method for the measurement of VOC, a testing protocol shall be submitted by the source in accordance with 401 KAR 50:045, and be approved by the Division.
- Sampling sites shall be located at the inlet and the outlet of the control device to measure the Mass Rate of VOC. Inlet sampling shall be done simultaneously with outlet sampling to determine the destruction efficiency.
- The following equation shall be used to calculate the mass destruction efficiency:

$$DE = \frac{\text{MR entering} - \text{MR exiting}}{\text{MR entering}} \times 100 \%$$

Where

DE = Destruction Efficiency of RTO, percent

MR entering = Mass Rate of VOC entering the control device

MR exiting = Mass Rate of VOC exiting the control device

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- d. The permittee shall conduct testing to demonstrate compliance with the capture efficiencies listed in Table 1 above.
- e. The permittee shall conduct a quarterly visual leak detection test for the valves in RTO. Any valve that is designated by the permittee as an unsafe-to-monitor or hard-to-reach valves are exempt from leak detection requirements. When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected. The results shall be recorded and reported with annual compliance certification.

For Emission Point 12 (Roll Storage)

- f. Compliance testing shall be performed for the capture equipment (capturing device, duct work) once during permit life. Testing shall be done to determine the capture efficiency of the emissions capturing device.

4. Specific Monitoring Requirements:

- a. The permittee shall monitor and maintain records of the daily usage rate (tons/day) of polystyrene raw material (at emission points 10 and 11), daily amount of Isopentane charged (tons/day), and the daily amount of finished product (tons/day).
- b. The permittee shall monitor the flow rate of the exhaust gases from the extrusion process, grinding process and the Reclaim Extruders into the RTO and the concentration of VOC's in the exhaust stream. A flow sensor shall be used to measure the flow rate and an infra-red sensor (IR sensor) shall be used to measure the concentration of the VOC's. A Computer program shall be used to integrate the flow rate and the concentration data to calculate the daily mass of VOC's inputted into the RTO. The data recorded shall be kept available either in hard copy or computer readable form. The daily VOC captured data shall be used to calculate the combined daily mass VOC emissions (tons/day) calculated from the emission points 10 through 15. See the compliance demonstration at the emission limitation above.

For Emission Point 12 (Roll Storage)

- c. The permittee shall monitor and maintain records of the following:
The permittee shall monitor all the parameters necessary and approved by Division to monitor proper capture and control of the VOC emissions from the roll storage.

RTO Requirements:

- d. The firebox temperature shall be measured by means of a data-recording device. The monitor shall be installed in the firebox or in the ductwork immediately downstream of the firebox before any substantial heat exchange is encountered.
- e. The firebox temperature shall be recorded at least once every 15 minutes or shall be recorded in 15-minute or more frequent block average values. The data recorded shall be kept available either in hard copy or computer readable form.
- f. Refer to Section E- Source Control Equipment Requirements for Compliance Assurance Monitoring (CAM) requirement for Emission Points 14 and 15.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

5. Specific Record keeping Requirements:

- a. See Specific Monitoring Requirements above.
- b. The permittee shall on annual basis calculate the styrene emissions from the emission points 10 through 18 using the source specific emission factor that is developed by testing.

For Emission Point 12 (Roll Storage)

- c. A log shall be kept of all routine and non routine maintenance performed on each capturing device.

RTO requirements:

- d. Record and report the firebox temperature averaged over the full period of the initial performance test (initial compliance demonstration test).
- e. Record and report the combustion zone residence time and the average flow rate over the full period of the initial performance test.
- f. Once a day check the firebox temperature (last 24 hours of recorded data) to note if the temperature is above the manufacturer's recommendation or the temperature established during the initial compliance test, which verified the 95% destruction efficiency.

6. Specific Reporting Requirements:

- a. The monthly VOC emissions (sum of daily emissions over a period of one calendar month) calculations shall be submitted to the Bowling Green Regional Office on semi-annual basis.
- b. Report the times when the firebox temperature drops below the manufacturer's recommendation or the temperature established during the initial compliance test which verified the 95% destruction efficiency and all operating days when insufficient monitoring data is collected.
- c. The semi-annual styrene emissions from emission points 10 through 18.

For Emission Point 12 (Roll Storage)

- d. All the times when the capture equipment is not working shall be reported to Division's Bowling Green regional office.

7. Specific Control Equipment Operating Conditions:

The RTO's combustion chamber(s) temperature shall not fall below the manufacturer's recommendation or the temperature established during the initial compliance test which verified the 95% destruction efficiency.

SECTION C - INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:020, Section 6. Although these activities are designated as insignificant the permittee must comply with the applicable regulation. Process and emission control equipment at each insignificant activity subject to an opacity standard shall be inspected monthly and a qualitative visible emissions evaluation made. Results of the inspection, evaluation, and any corrective action shall be recorded in a log.

No.	Description	Applicable Regulation
1	Impact Thermoforming	None
2	OPS Thermoforming	None
3	PWC Machines	None
4	Polypropylene Extrusion and Thermoforming	None
5	Plastic Grinding and Transfer/ Conveying System for Impact, Crystal, OPS, DI, PP (Feed Hoppers)	401 KAR 59:010 and 63:010
6	2- Zig- Zag Printer using UV Ink	None
7	Part cleaner/ Cold cleaner	None
8	# 2 FO Truck Fueling station (Bldg 1)	None
9	Truck Garage Activities (Two fueling stations)	None
10	Parts Washer	401 KAR 59:010 and 59:185
11	Boiler Back-up Fuel Tank (#2 FO)	None
12	Paper wrapped cup machine	None
13	4- Lid line dryer (0.373 MMBtu/hr)	401 KAR 59.010(3) - PM
14	4- Lid line reg dryer (0.17 MMBtu/hr)	401 KAR 59.010(3) - PM
15	4- Lid line crystallizer dryer (0.373 MMBtu/hr)	401 KAR 59.010(3) - PM
16	2- Cup line crystallizer dryer (895 cf/ hr)	401 KAR 59.010(3) - PM
17	2- Cup line regen dryer (0.331 MMBtu/hr)	401 KAR 59.010(3) - PM
18	2- Cup line crystallizer dryer (0.6 MMBtu/hr)	401 KAR 59.010(3) - PM
19	PET pellet unloading and handling system	401 KAR 59.010(3) - PM
20	6- Silicon coating of PET sheet	401 KAR 59.010(3) - PM
21	6- Trim scrap grinders for flaking PET trim scrap	401 KAR 59.010(3) - PM
22	2- Scrap sheet grinder for flaking off spec PET sheet and product	401 KAR 59.010(3) - PM
23	UV printing on PET product and Polypropylene	401 KAR 59.212 (6)
24	20,000 gallon fuel tank for diesel-back up fuel for boiler (Bldg 9)	None
25	30,000 gallon diesel tank station for Dart Fleet trucks/ Fuel Station (Bldg 8)	None
26	PET Print Prep Flamers (Corona Treaters); .032 MMBtu/hr, used to prep cups for printing in PET area	None
27	PET printer clean- up using IPA	401 KAR 59.212 (6)(3) – Printing exception 401 KAR 59.010 (3) – PM
28	Paper wrap printer clean-up using IPA	401 KAR 59.212 (6)(3) – Printing exception 401 KAR 59.010 (3) – PM

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

1. As required by Section 1b of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26; compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.
2. VOC, NO_x, SO₂, emissions, measured by applicable reference methods, or an equivalent or alternative method specified in 40 C.F.R. Chapter I, or by a test method specified in the state implementation plan shall not exceed the respective limitations specified herein.
3. VOC emissions from emission points 01 through 08 shall not exceed 240 TPY, to preclude applicability of 401 KAR 51:017, Prevention of Significant Deterioration of Air Quality. For compliance demonstration, see specific emission points under Section B.
4. SO₂ emissions from emission units 19 and 21 (800 HP Steam Boilers) shall not exceed 36 TPY, to preclude applicability of 401 KAR 51:017, Prevention of Significant Deterioration of Air Quality. For compliance demonstration, see specific emission points under Section B.
5. NO_x emissions from emission units 19 and 21 (800 HP Steam Boilers) shall not exceed 36 TPY, to preclude applicability of 401 KAR 51:017, Prevention of Significant Deterioration of Air Quality. For compliance demonstration, see specific emission points under Section B

SECTION E - CONTROL EQUIPMENT CONDITIONS

1. Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
2. Pursuant to 40 CFR 64.6 monitoring procedures for VOC in both the DI foam extrusion process (Emission Points 14 and 15), and the EPS container production (Emission Point 04) are described below.

Compliance Assurance Monitoring for the Capture and Destruction System in the DI Foam Extrusion Process:

Description: Direct Injection foam extrusion process

Identification: Emission points 14 and 15.

Control Technology: Regenerative Thermal Oxidizer (RTO)/ emission point 17.

Monitoring Approach:

A. Dart will monitor the average temperature in the combustion chamber of the RTO continuously.

B. Dart will monitor the capture airflow rate continuously.

Note: Pitot tubes and mass flow meters are used to determine the capture air feed to the RTO unit.

C. Dart will monitor the VOC concentration in the capture air continuously.

Note: An infrared sensor is used to determine the concentration in the capture air.

SECTION E - CONTROL EQUIPMENT CONDITIONS (Continued)

I. Indicator	A. Average combustion chamber temperature of RTO
Measurement approach	Thermocouples on each side of the combustion chamber will be used to determine average combustion temperature
II. Indicator Range	An excursion is defined as anytime the average combustion chamber temperature falls below 1500°F (established in source test); excursions trigger and inspection, corrective action and a report
III. Performance criteria	
Data Representativeness	Accuracy of thermal couple is $\pm 5^{\circ}\text{F}$
Verification of Operational Status	NA
QA/QC practices and criteria	Accuracy will be checked/verified annually
Monitoring Frequency	Continuously
Data Collection Procedure	Recorded on chart recorder

I. Indicator	B. Capture air flow rate
Measurement approach	A mass flow meter is used to continuously determine the capture air being feed to the RTO.
II. Indicator Range	The capture airflow rate is used to determine the capture amount; changes in capture rate trigger evaluations of the system to ensure correct operation.
III. Performance criteria	
Data Representativeness	Accuracy of flow meter +/- 2% from 10-100% of calibrated range.
Verification of Operational Status	
QA/QC practices and criteria	NA
Monitoring Frequency	Continuously monitor airflow. Compare capture rates weekly to typical capture range. Deviations trigger evaluation of the airflow system to ensure correct operation.
Data Collection Procedure	Capture airflow rate recorded on chart recorder.

SECTION E - CONTROL EQUIPMENT CONDITIONS (Continued)

I. Indicator	C. VOC concentration in capture air.
Measurement approach	An infra red (IR) sensor is used to continuously determine the concentration in the capture air.
II. Indicator Range	The concentration is used to determine the capture amount; changes in capture rate trigger evaluations of the system to ensure correct operation.
III. Performance criteria	
Data Representativeness	Accuracy of IR sensor is +/- 2% scale.
Verification of Operational Status	NA
QA/QC practices and criteria	The sensor is checked/calibrated at least quarterly.
Monitoring Frequency	Continuously monitor VOC concentration. Compare capture rates weekly to typical capture range. Deviations trigger evaluation of the VOC concentration monitoring system to ensure correct operation.
Data Collection Procedure	Inlet concentration recorded on chart recorder

During the destruction source testing the average temperature of the combustion temperature was determined to be 1500°F. All periods when the temperature falls below this level will be indicated on the Title V deviation reports. Dart will continuously monitor the combustion temperature, and record it on a chart recorder, to prove correct operation of the RTO. Two thermocouples inserted into either side of the combustion chamber are used to determine the average combustion temperature. At least once a year the thermocouples will be checked for accuracy and will be recalibrated or replaced if necessary.

Compliance Assurance Monitoring for Capture and Destruction System in the EPS Container Manufacturing Process

Description: Expandable Polystyrene container production/ bead handling/ preparation section.

Identification: Emission point 04

Capture and Incineration in Steam Boiler (emission points 01, 02, 03)

Monitoring Approach:

- A. Monitor concentration of VOC in capture air.
- B. Monitor flow rate of capture air
- C. Monitor flame in boilers – Emission Points 01, 02, 03.

SECTION E - CONTROL EQUIPMENT CONDITIONS (Continued)

I. Indicator	A. Concentration of VOC in capture air
Measurement approach	An infra red (IR) sensor is used to continuously determine the concentration in the capture air.
II. Indicator Range	The concentration is used to determine the capture amount. Changes in capture rate trigger evaluations of the system to ensure correct operation.
III. Performance criteria	
Data Representativeness	Accuracy of IR sensor is +/- 2 % scale
Verification of Operational Status	NA
QA/QC practices and criteria	The sensor is checked/calibrated at least quarterly.
Monitoring Frequency	Continuously monitor VOC concentration. Compare capture rates weekly to typical capture range. Deviations trigger evaluation of the VOC concentration monitoring system to ensure correct operation.
Data Collection Procedure	Inlet concentration recorded on chart recorder.

I. Indicator	B. Flow rate of capture air
Measurement approach	Pitot tubes are used to continuously determine the volume of capture air being feed to the steam boilers.
II. Indicator Range	The capture airflow rate is used to determine the capture amount. Changes in capture rate trigger evaluations of the system to ensure correct operation.
III. Performance criteria	
Data Representativeness	Accuracy of flow meters/pitot tubes +/- 10%.
Verification of Operational Status	
QA/QC practices and criteria	NA
Monitoring Frequency	Continuously monitor airflow. Compare capture rates weekly to typical capture range. Deviations trigger evaluation of the airflow system to ensure correct operation.
Data Collection Procedure	Capture airflow rate recorded on chart recorder.

SECTION E - CONTROL EQUIPMENT CONDITIONS (Continued)

I. Indicator	C. Flame in boilers – work practice
Measurement approach	Inspection and maintenance of burner
II. Indicator Range	An excursion is defined as failure to perform the annual inspection or the daily flame observation.
III. Performance criteria	
Data Representativeness	NA
Verification of Operational Status	NA
QA/QC practices and criteria	NA
Monitoring Frequency	Annual inspection of the burner and daily Observation of the flame.
Data Collection Procedure	Record results of annual inspection; test report of destruction test results; record of daily flame check observations.

Background/ Rational for Performance Indicators:

Dart collects VOC emissions from the bead handling and the bead pre-expanders and vents the emissions directly to the boilers for thermal destruction. The VOC concentration and flow rate of the capture air is monitored so that the amount of emissions reduction can be calculated. The capture air is only fed to operating boilers and the flow rate to the boilers is monitored to ensure a safe and efficient VOC capture. The boiler flame color is also monitored on a daily basis to ensure correct operation of the boilers and VOC thermal destruction. The safety vent valve position is monitored to ensure that the capture air is being directed to the boilers and not to the atmosphere. Dart has carried out emission testing to obtain the appropriate emission factor and has conducted a destruction test to determine the boiler destruction efficiency.

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

1. Pursuant to Section 1b (IV)1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
 - a. Date, place as defined in this permit, and time of sampling or measurements;
 - b. Analyses performance dates;
 - c. Company or entity that performed analyses;
 - d. Analytical techniques or methods used;
 - e. Analyses results; and
 - f. Operating conditions during time of sampling or measurement.
2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [Sections 1b(IV) 2 and 1a(8) of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
3. In accordance with the requirements of 401 KAR 52:020 Section 3(1)h the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
 - a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
 - b. To access and copy any records required by the permit;
 - c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.
4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.
5. Summary reports of any monitoring required by this permit shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation [Sections 1b-V-1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

6. The semi-annual reports are due by January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to 401 KAR 52:020 Section 23. If continuous emission and opacity monitors are required by regulation or this permit, data shall be reported to the Technical Services Branch in accordance with the requirements of 401 KAR 59:005, General Provisions, Section 3(3). All deviations from permit requirements shall be clearly identified in the reports.
7. In accordance with the provisions of 401 KAR 50:055, Section 1 the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
 - a. When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
 - b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall be submitted in writing upon request.
8. The owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Section F.7 above) to the Regional Office listed on the front of this permit within 30 days. Deviations from permit requirements, including those previously reported under F.7 above, shall be included in the semiannual report required by F.6 [Sections 1b-V, 3 and 4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
9. Pursuant to 401 KAR 52:020, Permits, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit and the U.S. EPA in accordance with the following requirements:
 - a. Identification of the term or condition;
 - b. Compliance status of each term or condition of the permit;
 - c. Whether compliance was continuous or intermittent;
 - d. The method used for determining the compliance status for the source, currently and over the reporting period.
 - e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

- f. The certification shall be postmarked by January 30th of each year. Annual compliance certifications should be mailed to the following addresses:

Division for Air Quality
Bowling Green Regional Office
1508 Westen Avenue
Bowling Green, KY 42104

U.S. EPA Region 4
Air Enforcement Branch
Atlanta Federal Center
61 Forsyth St.
Atlanta, GA 30303-8960

Division for Air Quality
Central Files
200 Fair Oaks Lane, 1st Floor
Frankfort, KY 40601

10. In accordance with 401 KAR 52:020, Section 22, the permittee shall provide the Division with all information necessary to determine its subject emissions within thirty (30) days of the date the KYEIS emission survey is mailed to the permittee.

SECTION G - GENERAL CONDITIONS**1. General Compliance Requirements**

- a. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:020 Section 3(1)(b) and a violation of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act). Noncompliance with this permit is grounds for enforcement action including but not limited to termination, revocation and reissuance, revision or denial of a permit [Section 1a-3 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020 Section 26].
- b. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a-6 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- c. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:020, Section 19. The permit will be reopened for cause and revised accordingly under the following circumstances:
 - (1) If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:020, Section 12;
 - (2) The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
 - (3) The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;
 - (4) New requirements become applicable to a source subject to the Acid Rain Program.

Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

- d. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or to determine compliance with the conditions of this permit [Sections 1a- 7 and 8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- e. Emission units described in this permit shall demonstrate compliance with applicable requirements if requested by the Division [401 KAR 52:020 Section 3(1)(c)].

SECTION G - GENERAL PROVISIONS (CONTINUED)

- f. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the permitting authority [401 KAR 52:020, Section 7(1)].
- g. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a-14 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- h. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a-4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- i. Except for requirements identified in this permit as state-origin requirements, all terms and conditions shall be enforceable by the United States Environmental Protection Agency and citizens. [Section 1a-15-b of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- j. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6) [Section 1a-10 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- k. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:020, Section 11(3) 2.].
- l. This permit does not convey property rights or exclusive privileges [Section 1a-9 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- m. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Cabinet or any other federal, state, or local agency.
- n. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry [401 KAR 52:020, Section 11(3) 4.].
- o. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders [401 KAR 52:020, Section 11(3) 1.].

SECTION G - GENERAL PROVISIONS (CONTINUED)

- p. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic Minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.
- q. Pursuant to 401 KAR 52:020, Section 11, a permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of this permit shall be considered compliance with:
 - (1) Applicable requirements that are included and specifically identified in the permit and
 - (2) Non-applicable requirements expressly identified in this permit.

2. Permit Expiration and Reapplication Requirements

- a. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:020, Section 12].
- b. The authority to operate granted shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:020 Section 8(2)].

3. Permit Revisions

- a. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:020, Section 14(2).
- b. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

SECTION G - GENERAL PROVISIONS (CONTINUED)**4. Construction, Start-Up, and Initial Compliance Demonstration Requirements**

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the construction of the equipment described herein, emission point 21 (800 horsepower boiler) in accordance with the terms and conditions of this permit.

- a. Construction of any process and/or air pollution control equipment authorized by this permit shall be conducted and completed only in compliance with the conditions of this permit.
- b. Within thirty (30) days following commencement of construction and within fifteen (15) days following start-up and attainment of the maximum production rate specified in the permit application, or within fifteen (15) days following the issuance date of this permit, whichever is later, the permittee shall furnish to the Regional Office listed on the front of this permit in writing, with a copy to the Division's Frankfort Central Office, notification of the following:
 - (1) The date when construction commenced.
 - (2) The date of start-up of the affected facilities listed in this permit.
 - (3) The date when the maximum production rate specified in the permit application was achieved.
- c. Pursuant to 401 KAR 52:020, Section 3(2), unless construction is commenced within eighteen (18) months after the permit is issued, or begins but is discontinued for a period of eighteen (18) months or is not completed within a reasonable timeframe then the construction and operating authority granted by this permit for those affected facilities for which construction was not completed shall immediately become invalid. Upon written request, the Cabinet may extend these time periods if the source shows good cause.
- d. For those affected facilities for which construction is authorized by this permit, a source shall be allowed to construct with the proposed permit. Operational or final permit approval is not granted by this permit until compliance with the applicable standards specified herein has been demonstrated pursuant to 401 KAR 50:055. If compliance is not demonstrated within the prescribed timeframe provided in 401 KAR 50:055, the source shall operate thereafter only for the purpose of demonstrating compliance, unless otherwise authorized by Section I of this permit or order of the Cabinet.
- e. This permit shall allow time for the initial start-up, operation, and compliance demonstration of the affected facilities listed herein. However, within sixty (60) days after achieving the maximum production rate at which the affected facilities will be operated but not later than 180 days after initial start-up of such facilities, the permittee shall conduct a performance demonstration on the affected facilities in accordance with 401 KAR 50:055, General compliance requirements. Testing must also be conducted in accordance with General Provisions G.5 of this permit.
- f. Terms and conditions in this permit established pursuant to the construction authority of 401 KAR 51:017 or 401 KAR 51:052 shall not expire.

SECTION G - GENERAL PROVISIONS (CONTINUED)

5. Testing Requirements

- a. Pursuant to 401 KAR 50:045 Section 2, a source required to conduct a performance test shall submit a completed Compliance Test Protocol form, DEP form 6028, or a test protocol a source has developed for submission to other regulatory agencies, in a format approved by the cabinet, to the Division's Frankfort Central Office a minimum of sixty (60) days prior to the scheduled test date. Pursuant to 401 KAR 50:045, Section 7, the Division shall be notified of the actual test date at least Thirty (30) days prior to the test.
- b. Pursuant to 401 KAR 50:045 Section 5, in order to demonstrate that a source is capable of complying with a standard at all times, any required performance test shall be conducted under normal conditions that are representative of the source's operations and create the highest rate of emissions. If [When] the maximum production rate represents a source's highest emissions rate and a performance test is conducted at less than the maximum production rate, a source shall be limited to a production rate of no greater than 110 percent of the average production rate during the performance tests. If and when the facility is capable of operation at the rate specified in the application, the source may retest to demonstrate compliance at the new production rate. The Division for Air Quality may waive these requirements on a case-by-case basis if the source demonstrates to the Division's satisfaction that the source is in compliance with all applicable requirements.
- c. Results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days or sooner if required by an applicable standard, after the completion of the fieldwork.

6. Acid Rain Program Requirements

- a. If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.
- b. The permittee shall comply with all applicable requirements and conditions of the Acid Rain Permit and the Phase II permit application (including the Phase II NOx compliance plan and averaging plan, if applicable) incorporated into the Title V permit issued for this source. The source shall also comply with all requirements of any revised or future acid rain permit(s) issued to this source.

7. Emergency Provisions

- a. Pursuant to 401 KAR 52:020 Section 24(1), an emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:
 - (1) An emergency occurred and the permittee can identify the cause of the emergency;

SECTION G - GENERAL PROVISIONS (CONTINUED)

- (2) The permitted facility was at the time being properly operated;
 - (3) During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
 - (4) Pursuant to 401 KAR 52:020, 401 KAR 50:055, and KRS 224.01-400, the permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
 - (5) This requirement does not relieve the source of other local, state or federal notification requirements.
- b. Emergency conditions listed in General Condition G.7.a above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:020, Section 24(3)].
- c. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:020, Section 24(2)].
8. Ozone Depleting Substances
- a. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
- (1) Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
 - (2) Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
 - (3) Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
 - (4) Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166
 - (5) Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
 - (6) Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
- b. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, *Servicing of Motor Vehicle Air Conditioners*.

SECTION G - GENERAL PROVISIONS (CONTINUED)

9. Risk Management Provisions

- a. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

RMP Reporting Center
P.O. Box 1515
Lanham-Seabrook, MD 20703-1515.

- b. If requested, submit additional relevant information to the Division or the U.S. EPA.

SECTION H - ALTERNATE OPERATING SCENARIOS

None

SECTION I - COMPLIANCE SCHEDULE

None